

# Product Datasheet

## Caspase 1 Antibody NB100-56565SS

Unit Size: 0.025 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



[support@novusbio.com](mailto:support@novusbio.com)

**Publications: 15**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:  
[www.novusbio.com/NB100-56565](http://www.novusbio.com/NB100-56565)

Updated 6/15/2014 v.20.1

**NB100-56565SS**

Caspase 1 Antibody (14F468)

Product Information	
Unit Size	0.025 mg
Concentration	Concentration 0.5
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	14F468
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein G purified
Buffer	PBS containing 0.05% BSA.
Target Molecular Weight	45 kDa kDa

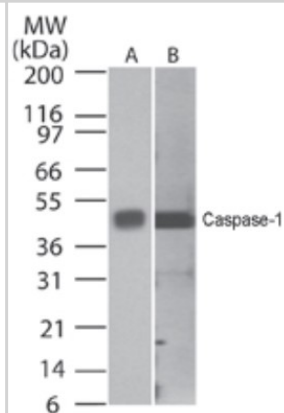
Product Description	
Host	Mouse
Gene ID	834
Gene Symbol	CASP1
Species	Human, Mouse
Species Reactivity	Human and Mouse. Predicted to react with Rat. Immunogen's sequence similarity with other species: Porcine/Pig (85%), Equine/Horse (80%), Canine (70%)
Specificity/Sensitivity	The antibody will recognize full-length Caspase-1 and cleaved caspase-1 forms that retain amino acids 371-390 of the Caspase-1 protein.
Immunogen	A synthetic peptide corresponding to amino acids 371-390 RQVRFSEFQPDGDAQMPTTE of human caspase-1 was used as immunogen.

Product Application Details	
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Immunohistochemistry 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500, Western Blot 0.5-2 ug/ml
Application Notes	Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.

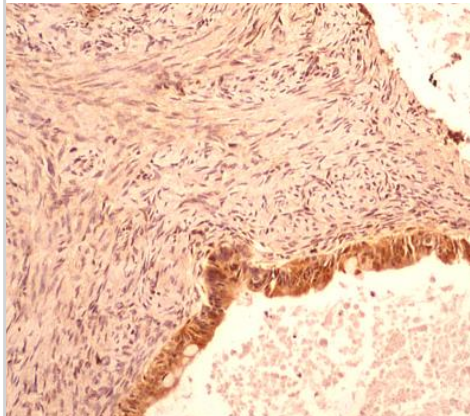


## Images

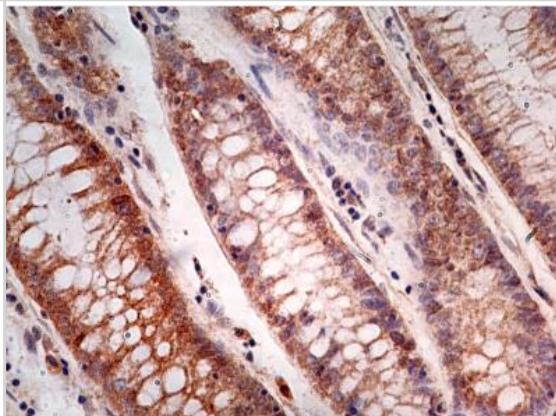
Western Blot: Caspase 1 Antibody (14F468) [NB100-56565] - analysis of Caspase-1 using a Caspase-1 monoclonal antibody. Human HeLa (A) and mouse NIH3T3 lysate probed with Caspase-1 antibody at 0.5 ug/ml and 2 ug/ml, respectively.



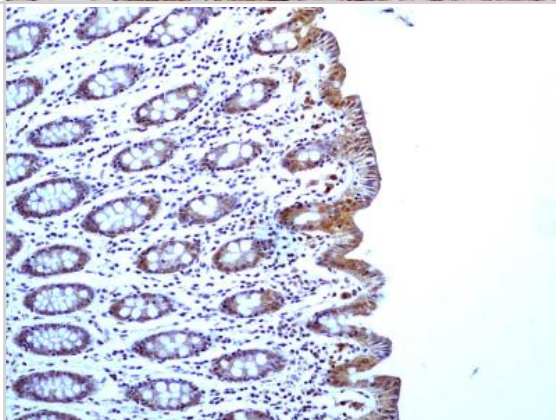
Immunohistochemistry-Paraffin: Caspase 1 Antibody (14F468) [NB100-56565] - IHC-P detection of Caspase 1 in a section of human ovarian cancer using 5 ug/ml concentration of Caspase 1 antibody (clone 14F468).



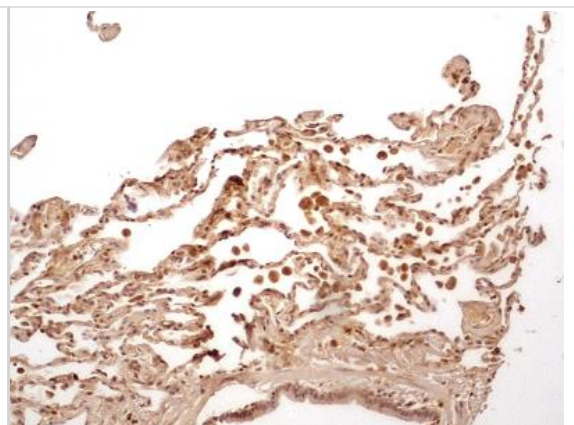
Immunohistochemistry-Paraffin: Caspase 1 Antibody (14F468) [NB100-56565] - Formalin-fixed, paraffin-embedded adenocarcinoma of the rectum stained with Caspase-1 antibody (5 ug/ml), peroxidase-conjugate and DAB chromogen. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.



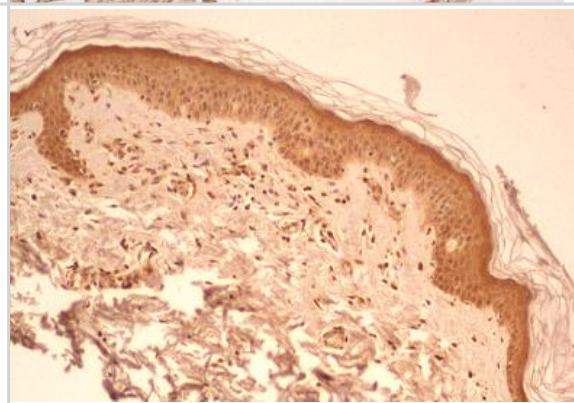
Immunohistochemistry-Paraffin: Caspase 1 Antibody (14F468) [NB100-56565] - IHC-P detection of Caspase 1 protein in a section of normal human colon using 5 ug/ml concentration of Caspase 1 antibody (clone 14F468). Distinct cytoplasmic staining along with some nuclear positivity was observed in crypts/mucosa, and staining was found to be more intense in the absorptive columnar epithelial cells. [10X Magnification]



Immunohistochemistry-Paraffin: Caspase 1 Antibody (14F468) [NB100-56565] - IHC-P detection of Caspase 1 protein in a section of normal lung from human using 5 ug/ml concentration of Caspase 1 antibody (clone 14F468). In this representative lung section, different type of cells including pseudostratified columnar epithelium of bronchiole and the simple squamous epithelium of alveoli may be seen to develop immunoreactivity for Caspase 1. [10X Magnification]



Immunohistochemistry-Paraffin: Caspase 1 Antibody (14F468) [NB100-56565] - IHC-P detection of Caspase 1 in a section of normal skin from human using 5 ug/ml concentration of Caspase 1 antibody (clone 14F468). Strong cytoplasmic/nuclear staining developed in all the epidermal cells, blood vessels and some cells of the dermal connective tissues layer. [10X Magnification]



## Publications

Duncan JA, Gao X, Huang MT et al. *Neisseria gonorrhoeae* activates the proteinase cathepsin B to mediate the signaling activities of the NLRP3 and ASC-containing inflammasome. *J Immunol*. 2009 May 15 [PMID: 19414800]

Taxman DJ, Swanson KV, Broglie PM et al. *Porphyromonas gingivalis* mediates inflammasome repression in polymicrobial cultures through a novel mechanism involving reduced endocytosis. *J Biol Chem*. 2012 Sep 21 [PMID: 22843689]

Hurst J, Prinz N, Lorenz M et al. TLR7 and TLR8 ligands and antiphospholipid antibodies show synergistic effects on the induction of IL-1beta and caspase-1 in monocytes and dendritic cells. *Immunobiology*. 2009 [PMID: 19249118]

Paciello I, Silipo A, Lembo-Fazio L et al. Intracellular *Shigella* remodels its LPS to dampen the innate immune recognition and evade inflammasome activation. *Proc Natl Acad Sci U S A* 2013 Nov 12 [PMID: 24167293] (WB, Mouse)

Banerjee M, Datta M, Majumder P et al. Transcription regulation of caspase-1 by R393 of HIPPI and its molecular partner HIP-1. *Nucleic Acids Res*. 2010 Jan [PMID: 19934260]

Taxman DJ, Holley-Guthrie EA, Huang MT et al. The NLR adaptor ASC/PYCARD regulates DUSP10, mitogen-activated protein kinase (MAPK), and chemokine induction independent of the inflammasome. *J Biol Chem*. 2011 Jun 3 [PMID: 21487011]

Craven RR, Gao X, Allen IC et al. *Staphylococcus aureus* alpha-hemolysin activates the NLRP3-inflammasome in human and mouse monocytic cells. *PLoS One*. 2009 Oct 14 [PMID: 19826485]

de Rivero Vaccari JP, Bastien D, Yurcisin G et al. P2X4 receptors influence inflammasome activation after spinal cord injury. *J Neurosci*. 2012 Feb 29 [PMID: 22378878]

Zhang X, Ibrahim E, de Rivero Vaccari JP et al. Involvement of the inflammasome in abnormal semen quality of men with spinal cord injury. *Fertil Steril*. 2013 Jan [PMID: 23040525]

Dostert C, Petrilli V, Van Bruggen R et al. Innate immune activation through Nalp3 inflammasome sensing of asbestos and silica. *Science*. 2008 May 2 [PMID: 18403674]

Rawat R, Cohen TV, Ampong B et al. Inflammasome up-regulation and activation in dysferlin-deficient skeletal muscle. *Am J Pathol*. 2010 Jun [PMID: 20413686]

Atay S, Gercel-Taylor C, Taylor DD. Human trophoblast-derived exosomal fibronectin induces pro-inflammatory IL-1B production by macrophages. *Am J Reprod Immunol*. 2011 Oct [PMID: 21410811]

More publications at <http://www.novusbio.com/NB100-56565>





### **Novus Biologicals USA**

8100 Southpark Way, A-8  
Littleton, CO 80120  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
novus@novusbio.com

### **Novus Biologicals Canada**

461 North Service Road West, Unit B37  
Oakville, ON L6M 2V5  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada@novusbio.com

### **Novus Biologicals Europe**

12 Cambridge Science Park  
Cambridge, CB4 0FQ  
United Kingdom  
Phone: +44 (0)1223 426001  
Fax: +44 (0)871 971 1635  
europe@novusbio.com

### **General Contact Information**

www.novusbio.com  
Technical Support: technical@novusbio.com  
Orders: orders@novusbio.com  
General: novus@novusbio.com

### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

**For more information on our guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee).**

